

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Original) A process for producing 1-hexene, which comprises trimerizing ethylene in the presence of a catalyst comprising a tantalum compound and an alkylating agent containing a metal under a condition wherein the water content in the reaction system is 4 moles or less per mole of the tantalum atom, and/or under a condition wherein the amount of molecular oxygen in the reaction system is 2 moles or less per mole of the tantalum atom.
2. (Original) The process for producing 1-hexene according to claim 1, wherein the water content in the reaction system is 3 moles or less per mole of the tantalum atom.
3. (Original) The process for producing 1-hexene according to claim 1, wherein the water content in the reaction system is 2 moles or less per mole of the tantalum atom.
4. (Original) The process for producing 1-hexene according to claim 1, wherein the water content in the reaction system is substantially anhydrous.
5. (Currently Amended) The process for producing 1-hexene according to claim 1, ~~any one of claims 1 to 4~~, wherein the amount of the molecular oxygen in the reaction system is 1.5 moles or less per mol of the tantalum atom.
6. (Currently Amended) The process for producing 1-hexene according to claim 1, ~~any one of claims 1 to 4~~, wherein the amount of the molecular oxygen in the reaction system is 1 mol or less per mole of the tantalum atom.
7. (Currently Amended) The process for producing 1-hexene according to claim 1, ~~any one of claims 1 to 4~~, wherein the amount of the molecular oxygen in the reaction system is substantially oxygen-free.

8. (Currently Amended) The process for producing 1-hexene according to claim 1,  
~~any one of claims 1 to 7~~, wherein the tantalum compound is a tantalum halide.

9. (Currently Amended) The process for producing 1-hexene according to claim 1,  
~~any one of claims 1 to 7~~, wherein the tantalum compound is tantalum pentachloride or  
tantalum pentabromide.

10. (Currently Amended) The process for producing 1-hexene according to claim 1,  
~~any one of claims 1 to 9~~, wherein the alkylating agent is a hydrocarbyl metal, a hydrocarbyl  
metal halide, or an alkylalumininoxane.

11. (Currently Amended) The process for producing 1-hexene according to claim 1,  
~~any one of claims 1 to 9~~, wherein the alkylating agent is tetramethyltin, tetraethyltin,  
dimethylzinc, methylolithium, trimethylaluminum, n-butyllithium, allyltriphenyltin,  
triethylaluminum, dimethylaluminum chloride, tetraphenyltin, methylalumininoxane, or  
methylmagnesium bromide.